



**Paulius Bušauskas**

Adviser of emergency response department

## Culling and safe disposal of pig carcasses-Experience of Lithuania

Culling and safe disposal of pig carcasses



# Lithuania



- Area-65,300 km<sup>2</sup>
- Population-2,790,472

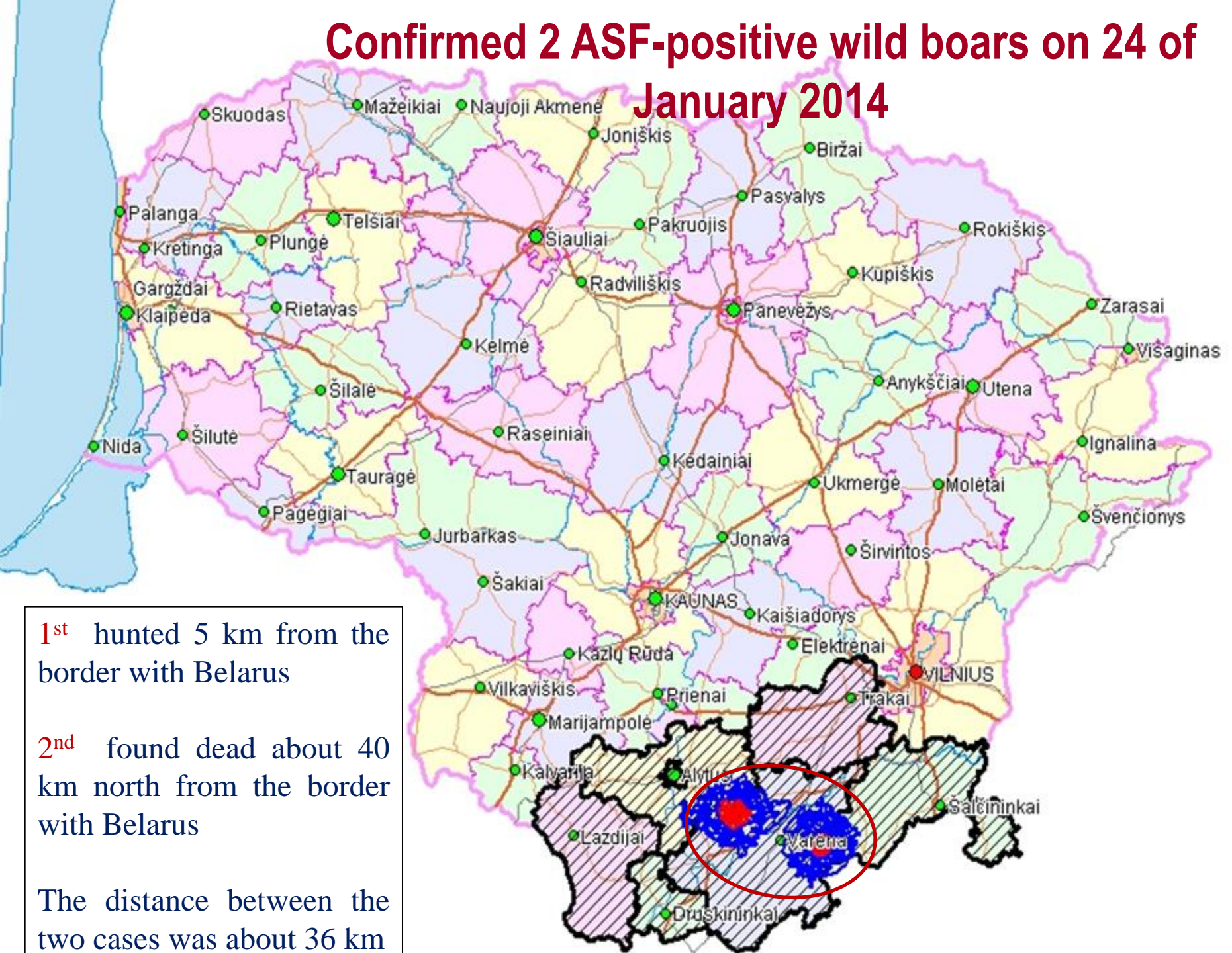


## Pig population:



Farm type	Keepers	No of pigs
Backyard	13190	40608
Commercial	435	519148

# Confirmed 2 ASF-positive wild boars on 24 of January 2014



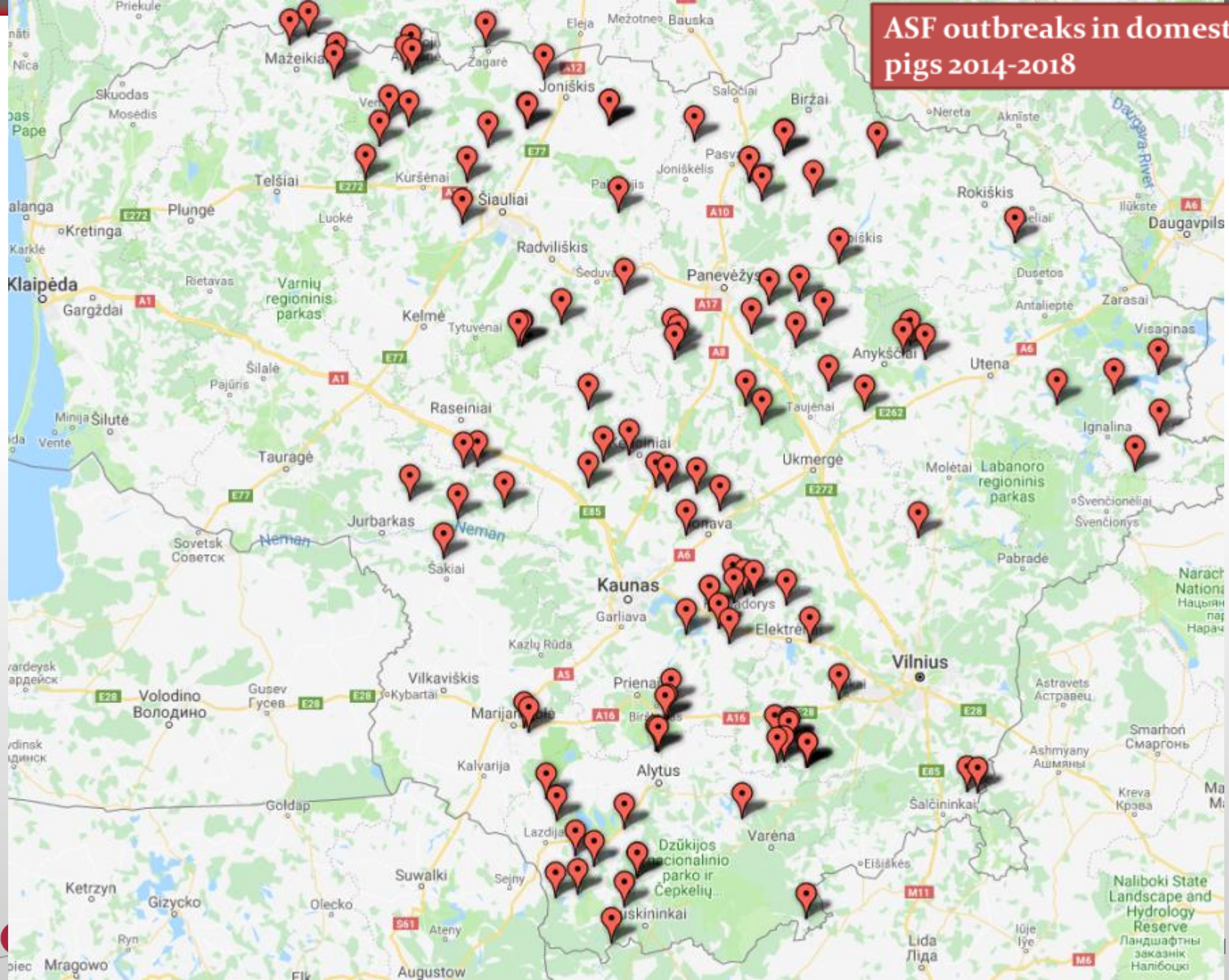
1<sup>st</sup> hunted 5 km from the border with Belarus

2<sup>nd</sup> found dead about 40 km north from the border with Belarus

The distance between the two cases was about 36 km



# ASF outbreaks in domestic pigs 2014-2018





# Preparedness for emergency situation

Mobile incineration for carcasses



Electrical stunning equipment



# Preparedness for emergency situation

Captive bolts



Equipment for disinfection



# Outbreak eradication

- The protection of animals at the time of slaughter or killing has been covered by European Community law since 1974 and was substantively reinforced since 1993;
- Main rule - animals shall be spared any avoidable pain, distress or suffering during their killing and related operations.
- In the case of emergency killing, the keeper of the animals concerned shall take all the necessary measures to kill the animal as soon as possible.

# Outbreak eradication

- The competent authority responsible for a depopulation operation shall establish an action plan to ensure compliance with the rules on the protection of animals at the time of killing, before the commencement of the operation.
- In particular, the stunning and killing methods planned and the corresponding standard operating procedures shall be included in the contingency plans, on the basis of the hypothesis established in the contingency plan concerning the size and the location of suspected outbreaks.



# Challenges

- What to do with carcasses?
- What culling method use?
- What disposal method use?
- Cleaning and disinfection?



# Challenge: How to manage pigs culling

Captive bolt



CO2 Gas



Electrical stunning equipment





# Challenge:

## How to manage pigs disposal



Burial on site ;

Rendering/incineration



Burning on site;





**7<sup>th</sup> August 2018 Outbreak eradication in  
commercial farm  
( 24336 pigs kept)  
*ACTIONS STEP BY STEP***



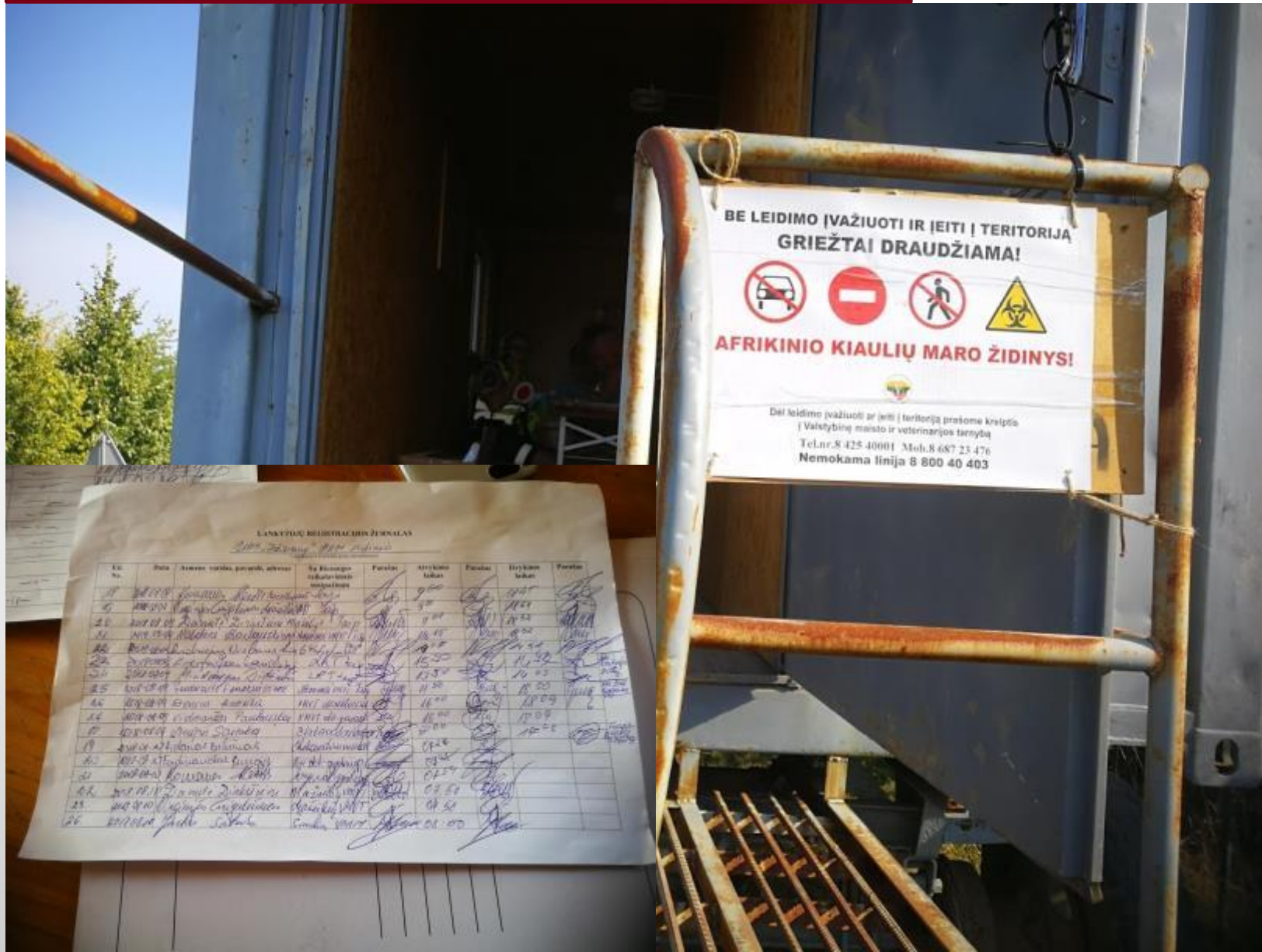
# Measures immediately applied from 24 July 2014

- European Commission, Member States and third countries were informed on the presence of ASF in domestic pigs in Lithuania.
- Immediate notifications were sent through the ADNS and WAHIS systems.
- Protection and surveillance zones were immediately established by order of SFVS Ignalina SFVS and Commission Decision adopted on 7 August 2018.
- A standstill for live pigs and pig meat products was immediately applied by Akmenės district municipality, the location of the outbreak was isolated and controlled. The police were involved in road control within





# ENTRANCE CONTROL



**BE LEIDIMO ĮVAŽIUOTI IR ĮEITI Į TERITORIJĄ  
GRIEŽTAI DRAUDŽIAMA!**



**AFRIKINIO KIAULIŲ MARO ŽIDINYS!**

Dėl leidimo įvažiuoti ir įeiti į teritoriją prašome kreiptis  
į Valstybinę mišio ir veterinarijos tarnybą  
Tel.nr. 8 425 40001 Mob.8 687 23 476  
Nemokama linija 8 800 40 403

**LANKYTOJŲ REGISTRACIJOS ŽURNALAS**

Sl. No.	Data	Asmens vardas, pavardė, adresas	Ar išsargus uždaromasis pastatas	Pasirašas	Atvykimo laikas	Pasirašas	Išvykimo laikas	Pasirašas
17	2019-08-05	Jonaitis, Rimas	Ne	[Signature]	09:00	[Signature]	11:00	[Signature]
18	2019-08-05	Jonaitis, Rimas	Ne	[Signature]	09:00	[Signature]	11:00	[Signature]
19	2019-08-05	Jonaitis, Rimas	Ne	[Signature]	09:00	[Signature]	11:00	[Signature]
20	2019-08-05	Jonaitis, Rimas	Ne	[Signature]	09:00	[Signature]	11:00	[Signature]
21	2019-08-05	Jonaitis, Rimas	Ne	[Signature]	09:00	[Signature]	11:00	[Signature]
22	2019-08-05	Jonaitis, Rimas	Ne	[Signature]	09:00	[Signature]	11:00	[Signature]
23	2019-08-05	Jonaitis, Rimas	Ne	[Signature]	09:00	[Signature]	11:00	[Signature]
24	2019-08-05	Jonaitis, Rimas	Ne	[Signature]	09:00	[Signature]	11:00	[Signature]
25	2019-08-05	Jonaitis, Rimas	Ne	[Signature]	09:00	[Signature]	11:00	[Signature]
26	2019-08-05	Jonaitis, Rimas	Ne	[Signature]	09:00	[Signature]	11:00	[Signature]



# Burial on site





# Burial place for animals and feed (in mass culling places)





















# CONTAINERS FOR KILLING





# CONTAINERS FOR KILLING











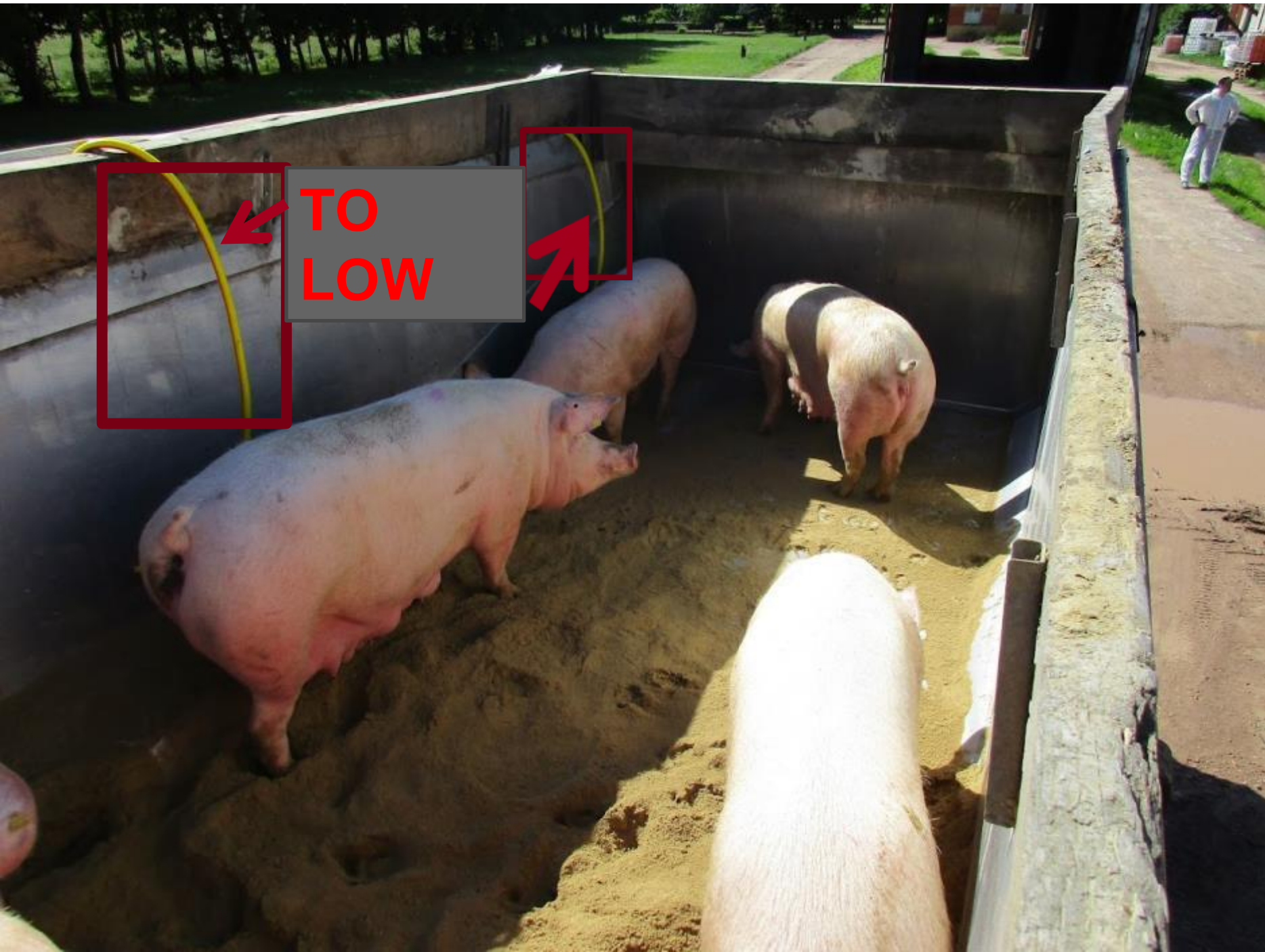
# CO2 GAS FOR KILLING





# CULLING PROCES USING CO 2 GAS





**TO  
LOW**





















Desinfection





# Territory disinfection









# Post Mortem Lesions























# Experience in backyard farms



Killing with  
electrical stunning  
equipment/captive  
bolt



# Experience in backyard farms

Disposal by burial on the site









Disposal method	Advantages	Disadvantages
Rendering	Clean, no environmental problems, no public complains	Plant capacity, transportation capacity, risk spreading of the disease
Burning on the site	Shorter distances and transports, less risk of spreading the disease	Risk of fire, environmental problem such as smoke, weather conditions
Burial on the site	Technical and practical easy, shorter distances and transports, less risk of spreading the disease,	Acceptance and approval of the public and environmental CA, level of the ground waters, ground surface (rocks).





Paulius Bušauskas  
State Food and Veterinary Service  
Adviser of Emergency Response Department  
E-mail: paulius.busauskas@vmvt.lt



WORLD ORGANISATION FOR ANIMAL HEALTH  
*Protecting animals, preserving our future*

12, rue de Prony, 75017 Paris, France  
[www.oie.int](http://www.oie.int)  
media@oie.int - oie@oie.int

